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Samsung Electronics America

Samsung Tech Talk

Your source for service information

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TV Test Jigs Are Back in Stock at GPCA!

Scott Whitman

Manager, CE Product Support

The purpose of the TV Test jig, if you are not already aware, is to troubleshoot video issues that exist on or between the main board and the panel. It also checks power supply operation to the main board.

Using the jig will reduce the amount of time you need to service picture issues by letting you quickly isolating defects. It will also reduce the number of times you unpack unneeded parts, letting you keep their seals intact.

BN81-07125A **A/S Panel Test JIG**

- Compatible with the majority of 2010, 2011, and 2012 LCD/LED Panels.
- Isolates defects on or between the SMPS, Main, LVDS, and TCon/Panel.
- Allows the verification of defects prior to the installation of new parts.

Caution: Do not use this jig on TVs with screen sizes 32" and smaller. If the panel does not have a "standard" TCon board, using the jig can damage the panel, main board, and jig.

Notice: Due to Hurricane Sandy, we could not complete the newsletter by our usual deadline. We apologize for the delay.

New Test Patterns Available on 2012 Echo-P and X10 Plus Chipsets

Khaled Abuali and Paul Kim

Assistant Managers, Product Support

The 2012 Echo-P and X10 Plus chipsets have new internal test patterns that you can display without bringing up the Factory Menu and use to diagnose and isolate picture issues between the Main and T-Con/Logic boards. You can also use them to diagnose picture defects with customers over the phone. The test patterns vary between chipsets and product types. Please see the table towards the bottom of the page.

The test patterns will timeout after about 10 seconds or you can press Exit to go back to the main screen.

These test patterns are available only for the following chipsets:

Echo-P: LED ES7500/7550, ES8000, and PDP E7000 and E8000

X10 Plus: LED ES7100/7150, ES6820, ES6600, ES6500/6550/6580, ES6100/6150, EH5300, PDP E6500, E550

Activate the Test Patterns with the following key combinations:

MUTE+1+4+7+MUTE → Displays Main Board Internal Test pattern

MUTE+3+6+9+MUTE → Displays T-CON/Logic Board Internal Test pattern

Note: These patterns do not work from within Smart Hub. You must exit Smart Hub to a normal TV source.

		Mute-147-Mute (Main Board)	Mute-369-Mute (T-Con/Logic Board)
LED	Echo-P	Pattern 1	Pattern 3
	X10P	Pattern 1	Pattern 1
PDP	Echo-P	Pattern 2	Pattern 2
	X10P	Pattern 1	Pattern 2

Pattern 1: White, Yellow …	Pattern 2 Black, Blue …	Pattern 3 Horizontal bars

New Test Patterns Available on 2012 Echo-P and X10 Plus Chipsets

continued

Using Test Patterns for Troubleshooting

You can use the test patterns to isolate the defect to a particular component. See the table below

Main Board Test Pattern Display	T-Con/Logic Board Test Pattern Display	Possible Cause Of Problem
OK	OK	Source
NG	OK	Main Board or LVDS Cable
NG	NG	T-Con/Logic or Panel

Please Send Us Your Comments!

Something you'd like to see in the Samsung Tech Talk Newsletter? If there a topic/issue we haven't covered that you'd like us to write about, **LET US KNOW!**

Please send your comments to:

training@sea.samsung.com

Understanding that !@# Firmware Loaded On Your USB Flash Drive

Scott Whitman

Manager, CE Product Support

How many times have you tried to upgrade firmware on a Samsung TV and encountered one of the many pop-up error messages? More importantly, if this happens, are you fully prepared to find out why?

This month, I will cover the 2011 D8000 series PDP TV firmware load process. The procedure is the same for most 2011 product, but the images are specific to this model.

As a preface to the rest of the article, I will assume you already have access to GSPN and know how to download and extract the firmware to a USB stick.

First, let's review the folder name and structure. When you enter the customer's menu and select Support > Contact Samsung, the folder name with the current firmware version is displayed. See Image 1 below.

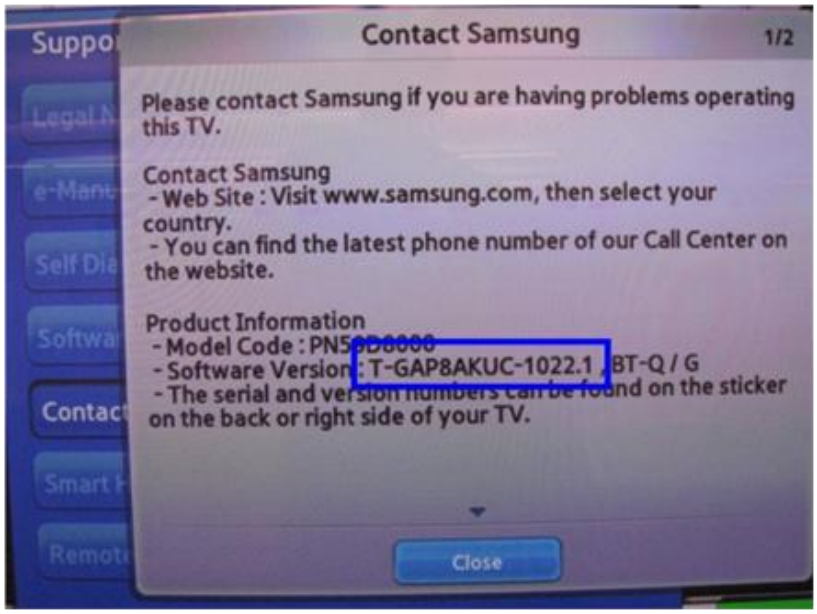

Contact Samsung
1/2
Please contact Samsung if you are having problems operating this TV.
Contact Samsung
- Web Site : Visit www.samsung.com, then select your country.
- You can find the latest phone number of our Call Center on the website.
Product Information
- Model Code : PN5
- Software Version : T-GAP8AKUC-1022.1
BT-Q / G
- The serial and version numbers can be found on the sticker on the back or right side of your TV.
Close

Image 1

The initial folder on the USB stick will have a folder name associated with the TV. If you ever have a problem installing firmware, such as a "File Not Found" error, the first thing you should do is compare the folder name and version in the TV to the folder name and version located on the USB stick. To identify the version of firmware located on the USB stick, click the root folder (in this case "T-GAP8AKUC") and then the "image" sub folder so that the various files are displayed. The "info" text file holds the reference information. See Image 2 on the next page.

Understanding that !@# Firmware Loaded On Your USB Flash Drive

continued

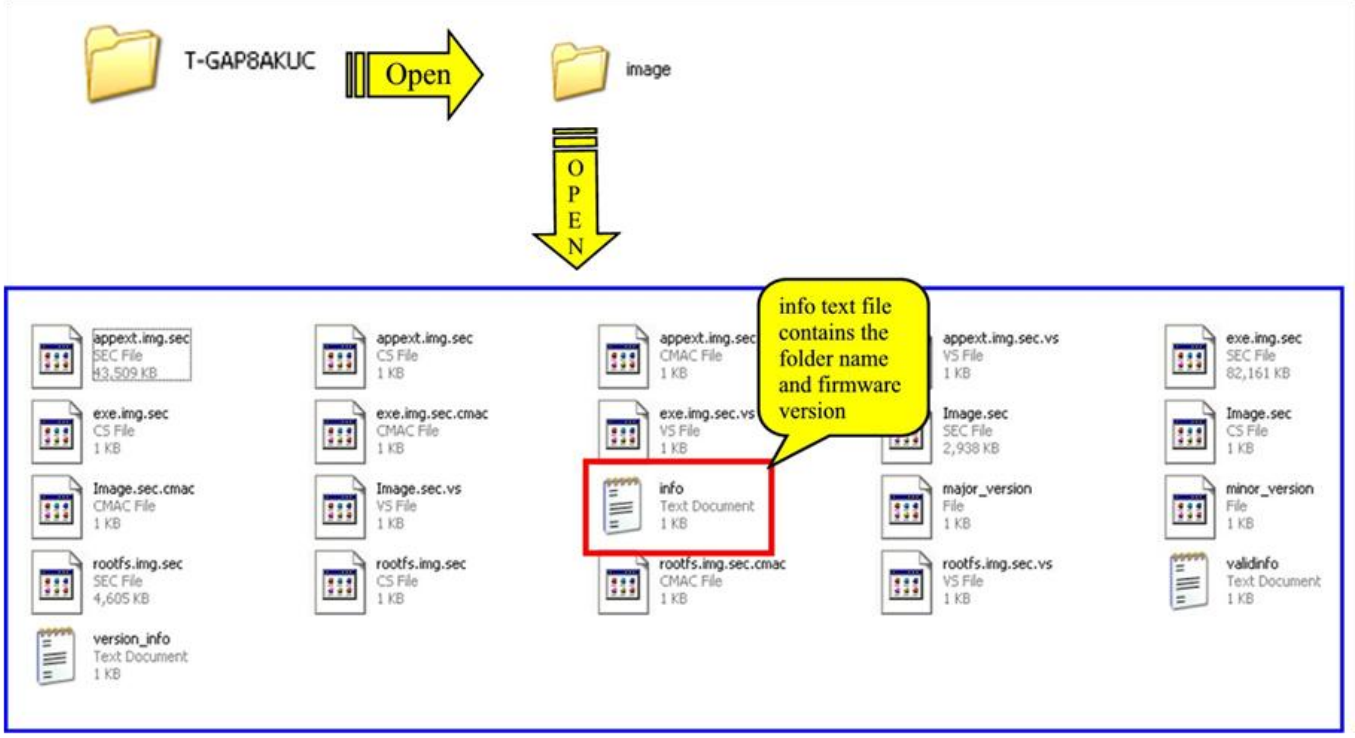


Image 2

Clicking the" info" file opens your Note Pad program (the actual program may vary from PC to PC) and displays the contents. Shown below in Image 3 is the text field that is displayed. Compare this to the root folder name, folder name, and firmware version shown on the customer's "Contact Samsung" screen.

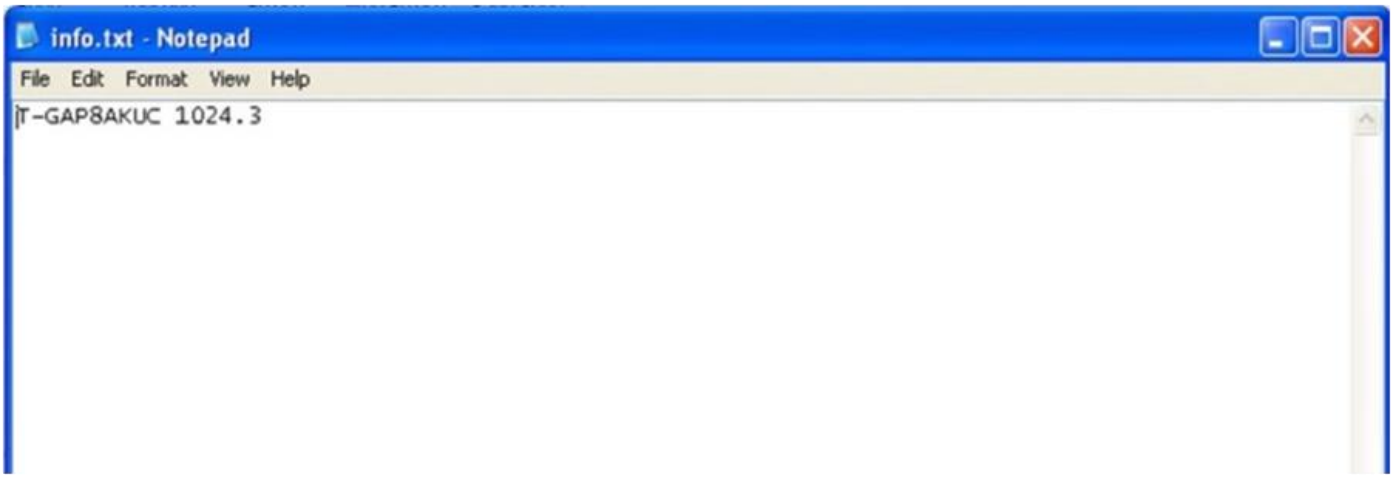


Image 3

Understanding that !@# Firmware Loaded On Your USB Flash Drive

continued

If there is no file loaded on the USB stick, or the incorrect file has been loaded, or loaded incorrectly, the error message in Image 4 appears. If this happens, you now have the information you need to troubleshoot the reason and resolve the issue.

Image 4

There are several reasons for firmware upgrade failure. The most common has to do with how the file is pulled from GSPN. In GSPN, the file is stored as an .exe (executable) file. This means that all you need to do is click the file and it will self load. However, since it is a zipped file, there is still the process of extraction. Unzipping tools are not created equal, and, as with any of your tools, knowing how your specific unzipping tool operates will greatly improve consistency and success.

Some of the most common file related causes for failure are:

1. The root directory is not created, so only the “image” folder is displayed.
2. Two root directories are created, one within the other with the “image” folder located within the second root folder.
3. A defective (or non-compatible) USB stick.
4. A corrupted file.
5. An incorrect file.

The first two you can now identify and quickly correct with confidence. The third requires checking with a PC or using a different USB stick. The fourth will require you to download the file again. The fifth, like the first two, can be easily identified now that you understand the firmware package.

Next month, I will cover updating the logic board firmware.

The Smart Hub Info Page

Khaled Abuali and Paul Kim
Assistant Managers, Product Support

The Smart Hub Info Page is a quick summary page that displays useful Smart Hub information that you can use for troubleshooting. To display the page while in the Smart Hub home page, press the Fast Forward+2+8+9+1 keys on the remote control. You should see a message that looks like the one below.

Wired MAC : fe90fb90d6ec
DUID : BDCJYSFBK6TYE
Firmcode : T-INFOLINK2012-1011
Server Type : operating, Country : US
SmartHub : 4.486, SEF : 0.970
Network Test : true, Hubsite Test : true
Model Code : 12_ECHOP
model.info file : false
Plugin Model : 12_ECHOP
- ProductType : TV
- CategoryType : LED
- ChipInfo : ECHO_P
- Model : UES7500
- LocalSet : US
OK
More

Below are explanations of some of the fields that you can use for troubleshooting.

Wired MAC: This is the MAC address of the wired LAN on the main board. The wired MAC is used even if the TV is connected wirelessly. This 12-digit ID is unique to each TV set and is used to generate the DUID ID. Smart Hub uses this ID to identify each TV on the network. If the MAC address is corrupted, then the TV will be rejected by the Smart Hub server.

A valid MAC address should consist of the numbers 1 to 9 and letters A to F. Any other values indicate a hardware failure and that the Main Board needs to be replaced.

Network Test: Network Test tests the communication between the TV and customer's router. The value it displays should be "true". If the value is "false", this indicates that the TV is unable to communicate with the customer's network. This failure can be caused by a network setting or the TV hardware. Please check Network Status from the Main Menu.

Hubsite Test: The Hubsite Test tests the communication between the TV and the Smart Hub server. If the value is "false", there could be a Smart Hub issue or the ISP could be blocking traffic to the server.

The Smart Hub Info Page

continued

Country: The value should be US. If the value is other than US or blank, you can press Fast Forward+2+8+9+Rewind on the remote to bring up a list of countries from which you can select US.

How to Get Samsung's SmartSVC App

Chuck Russo

Assistant Manager, Training

Paul Kim

Assistant Manager, Product Support

Now available for iOS and PC as well as for Android, Samsung's new SmartSCV app lets you access the following invaluable features right on your own PC or mobile device:

- How to Videos
- Manufacturing information
- Important notices and alerts
- Troubleshooting by symptom
- Screens that let you submit repair information to Samsung
- Service guides

Registering for and/or installing the Samsung SmartSVC app is easy. Just follow the direction below. To start, go to http://184.73.184.71. The following screen appears.

SAMSUNG SMART SVC
SAMSUNG MOBILE APP FOR REPAIR TECHNICIAN
USER
PASSWORD
LOGIN
SAMSUNG
Scan.
Browse.
Repair.
This app will enable you to use your Smartphone or Tablet and scan a unit's barcode which will then bring service tips, bulletins, and other relevant service information exclusively to that unit.
DOWNLOAD App for iOS
DOWNLOAD App for Android
PC VERSION Register
MANUALS & Documentation

FOR PC - If you have already registered in another Samsung app.

1. If you already registered in another app and have a USER NAME and PASSWORD, just fill in the information in the upper right corner of the screen, and then click LOGIN.

How to Get Samsung's SmartSVC App

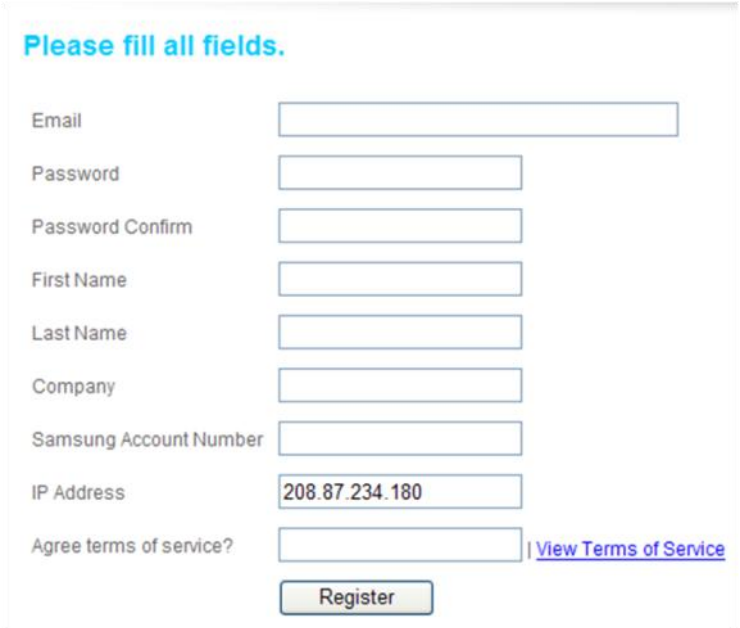
continued

2. A "Welcome" screen and instructions with option tabs appear. You're ready to use this APP!!

FOR PC - If you have not registered.

1. If you have not registered, click the **PC VERSION** Register icon.

2. The screen below appears. Fill in all fields. (Your personal "IP Address" appears automatically.)



How to Get Samsung's SmartSVC App

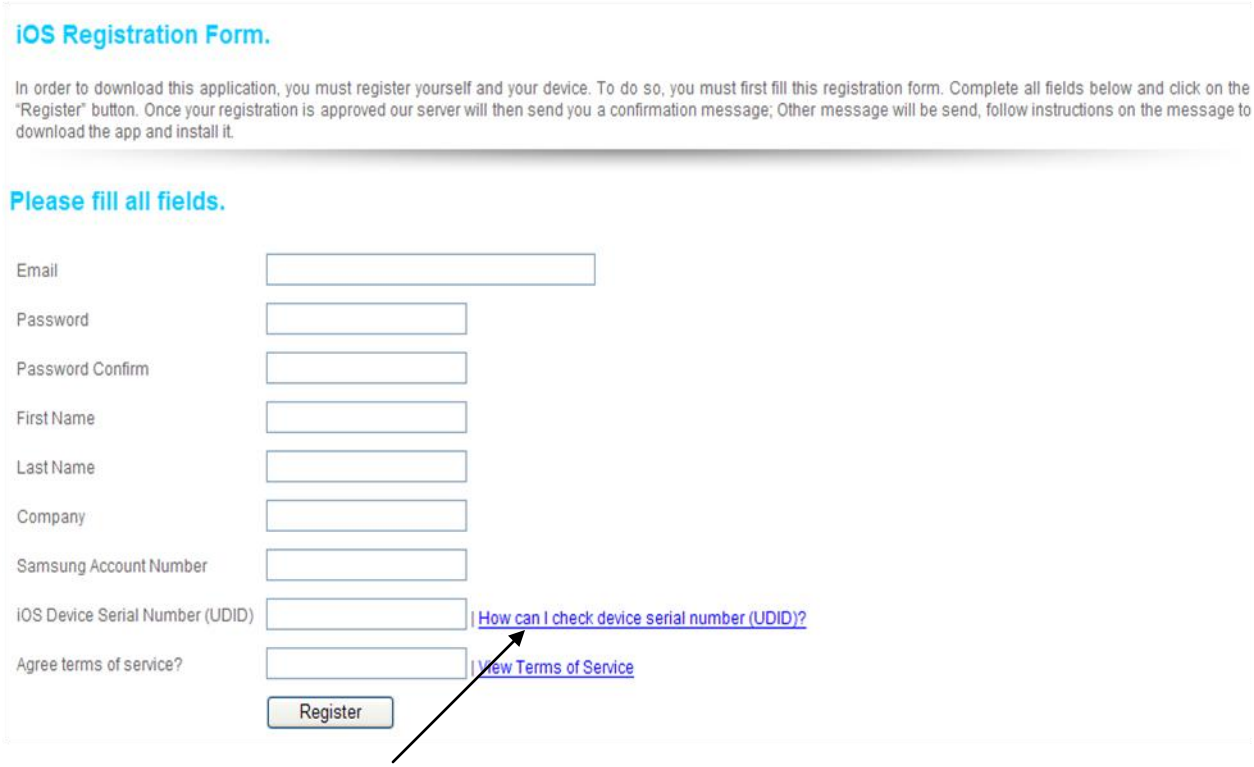
continued

3. Click "Register" and allow approximately 1 to 3 business days for processing.

For iOS

1. Click the **DOWNLOAD App for iOS** icon.

2. Fill out the iOS Registration form.


iOS Registration Form.
In order to download this application, you must register yourself and your device. To do so, you must first fill this registration form. Complete all fields below and click on the "Register" button. Once your registration is approved our server will then send you a confirmation message; Other message will be send, follow instructions on the message to download the app and install it.
Please fill all fields.
Email
Password
Password Confirm
First Name
Last Name
Company
Samsung Account Number
iOS Device Serial Number (UDID)
How can I check device serial number (UDID)?
Agree terms of service?
View Terms of Service
Register

3. Click "**How can I check device serial number (UDID)?**" and follow the instructions that appear on the screen.
4. Click "Register".
5. Within 1 to 3 days, you will receive an approval e-mail with a download link. Click the download link.
6. Download the two files made available by the link (shown below), and then save them on your local drive:
   - SmartSVC.ipa
   - SmartSVC.mobileprovision
7. Open iTunes and connect your iPhone, iPad, or iPod to your PC.

How to Get Samsung's SmartSVC App

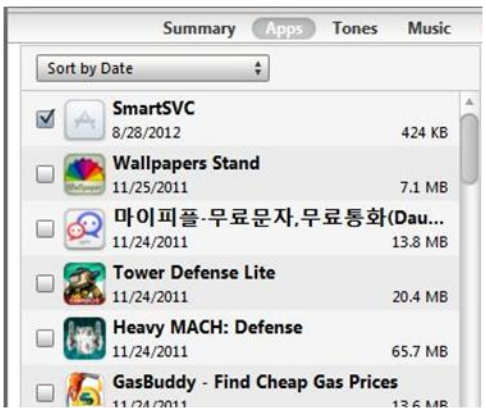
continued

8. Drag and drop the SmartSVC.mobileprovision file into iTunes under Apps in the Library.

9. Drag and drop the SmartSVC.ipa file into iTunes under Apps in the Library.

10. Synchronize the Apps with your device.

Sync .app files with iTunes



How to Get Samsung's SmartSVC App

continued

11. Click "**Apply**" to complete the sync.

For ANDROID:

1. Click the **DOWNLOAD App for Android** icon.

The screen below appears:

SAMSUNG
SMART SERVICE
WELCOME TO SMART SVC APP FOR ANDROID
1 Check Android Version on your Device
Platform | Codename | API Level | Device | Compatible
ANDROID 1.5 | Cupcake | 3 | Phone | NO
ANDROID 1.6 | Donut | 4 | Phone | NO
ANDROID 2.1 | Eclair | 7 | Phone | NO
ANDROID 2.2 | Froyo | 8 | Phone | NO
ANDROID 2.3.3 - ANDROID 2.3.7 | Gingerbread | 10 | Phone | YES
ANDROID 3.1 | Honeycomb | 12 | Tablet | YES
ANDROID 3.2 | | 13 | |
ANDROID 4.0 - ANDROID 4.0.2 | Ice Cream Sandwich | 14 | Phone/Tablet | YES
ANDROID 4.0.2 - ANDROID 4.0.4 | | 15 | |
ANDROID 4.1 | Jellybean | 16 | Phone/Tablet | YES
2 Download Barcode Scanner App
Note: this app must be installed prior to use SMART SVC APP
3 Download SMART SVC App

How to Get Samsung's SmartSVC App

continued

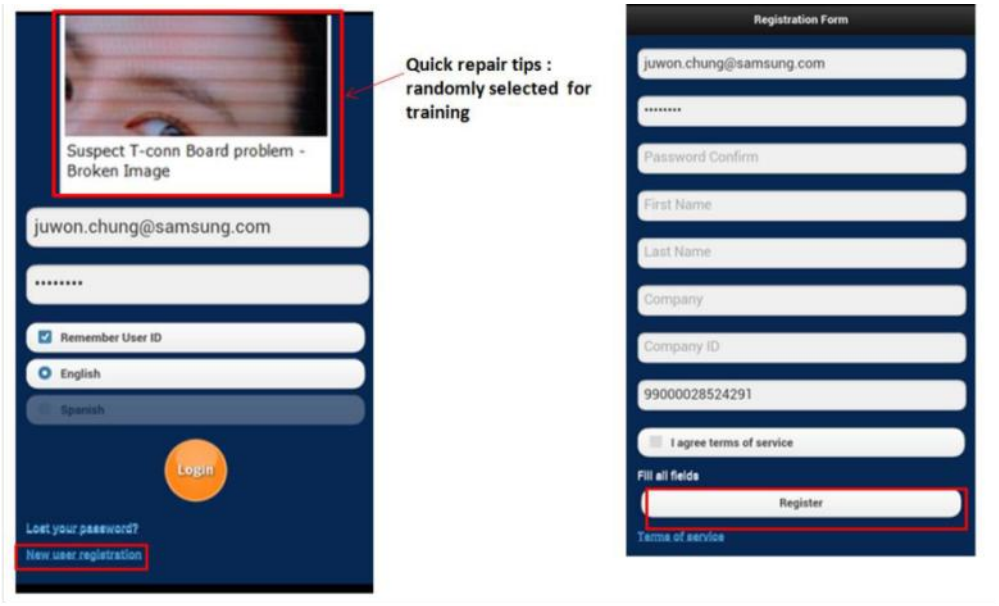
2. Download the Barcode Scanner App to your Phone.
   A. In Play Store (the Android marketplace), type in "Barcode Scanner" in the Search field.
   B. Look for the barcode scanner developed by the Zxing team .
   C. Download and install the app.

   Note: Without this app, the barcode feature in the SMART service app will not work.
3. Download the Smart SVC App.
   A. Using the browser in your smart phone, go to the following address: http://183.73.71/download.php.
   B. Alternately, you can scan this QR code:

   Download and then install the SmartSVC app.
4. Start the SmartSVC app, and then register.

   Click **New User Registration**.

   Enter all the information , and then click **Register**.



5. After you fill in the registration information and register, Samsung will review the registration. Upon approval, you'll be registered and have access to our Smart SVC app and its features.

Quick Tip: Apple Products Supported by Samsung HTS's

Michael Vigliotti

Assistant Manager, Product Support

There has been some confusion about which Apple products are supported by Samsung's new 2012 Home Theater line up. Below are two quick reference lists showing what is compatible and what is not. It is important to remember that our Home Theaters only support Digital iPod / iPhone connections and they do not support the older analog format. Other manufactures have these same specifications.

iPods / iPhones that ARE supported on our Blu-ray Home Theaters and Audio Docs.

BD-HTS: HT-EM or ES 4/5/6/8 series **MINI: MM-E430D/E430/E460D**
iPod touch 4th/3rd/2nd generation
iPod classic 6th / iPod with video
iPod with dock connector
iPod with Click Wheel.
Pod nano 6th/5th generation
iPhone 4S / iPhone 4
iPhone 3GS / iPhone 3G / iPhone

WAD (Wireless Audio with Dock)	
DA-E550/E570	**DA-E650/E651/E670/E750/E751**
iPod touch 4th/3rd generation	iPod touch 4th/3rd
iPod nano 6th/5th generation	iPod nano 6th/5th generation
iPhone 4S / iPhone 4	iPhone 4S / iPhone 4
iPhone 3GS	iPhone 3GS / iPad 2 / iPad

2011 TV Minimum Firmware Versions Required for Over the Network Firmware Upgrades

Khaled Abuali and Paul Kim

Assistant Managers, CE Product Support

If the Genoa based TV you are servicing has firmware (F/W) older than the Over the Network (OTN) requirement listed in the table below, you cannot upgrade the TV's F/W using Upgrade by Online. To add the ability to use Upgrade by Online, you must download the latest TV F/W from the GSPN or Samsung website and upgrade the TV's F/W by USB. Once you have upgraded the TV to the latest F/W, future upgrades can be performed using Upgrade by Online.

The table below lists the Genoa TVs you can upgrade using Upgrade by Online, the minimum F/W the TV must have to be upgraded by Upgrade by Online, and the currently available F/W version.

Model	F/W Type	Minimum F/W	Current Version on OTN Server
Genoa-P D8000 D8000	T-GAP8AKUC	1024.3	1029.0
Genoa-P D7000 D7000, D7900	T-GAPAKUC	1021.1	1026.0
Genoa-S 768M D6300, D6900	T-GASFAKUC	1020.2	1026.0
Genoa-S 512M D6000, D6050, D6400, D6420, D6450, D6500	T-GASAKUC	1024.0	1030.0

You can verify the TV's current firmware by going to Menu > Support > Contact Samsung.

Contact Samsung
1/2
Please contact Samsung if you are having problems operating this TV.
Contact Samsung
- Web Site : Visit www.samsung.com, then select your country.
- You can find the latest phone number of our Call Center on the website.
Product Information
- Model Code : UN75D9500
- Software Version : T-GAP9AKUC-1005.5, BT-Q / G
- The serial and version numbers can be found on the sticker on the back or right side of your TV.
Close

2011 TV Minimum Firmware Versions Required for Over the Network Firmware Upgrades

continued

To upgrade a TV connected to the Internet using Upgrade by Online, follow these steps:

1. Select Menu > Support

2. Select Software Upgrade.

3. Select By Online

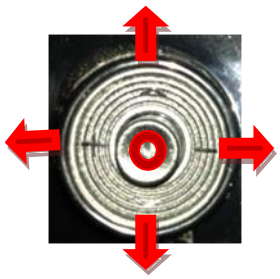
The Fastest Way to Switch Between Store Demo Mode and Home Mode

Nicholas Webert

Regional Technical Trainer

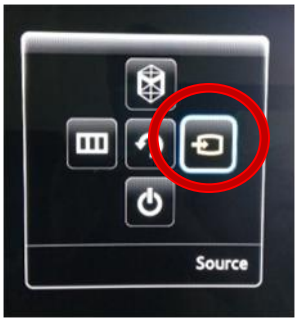
If a customer buys an open box or floor model TV, sometimes the unit is left in Store Demo Mode. Store Demo Mode periodically displays the model's features, and returns all the TV's settings to their factory defaults every thirty minutes. The TV must be switched to Home Mode for the customer to gain normal control of the TV's operations.

The function jog dial on 2012 Samsung televisions provides a fast and easy way to switch the TV between Store Demo Mode and Home Mode. Located on the bottom right or bottom left of the TV screen, the jog dial can be pressed in or in any of four directions: up/down and left/right.



To switch the TV to Store Demo Mode, press the center of the jog dial in. The screen displays a virtual jog control. Press the left side of the jog dial and the virtual jog highlights the Menu icon. Now press the center of the jog dial in and hold for five seconds. The television switches to the Store Demo Mode.

To switch back to Home Mode, press the center of the jog dial in. Next, press the right side of the dial so that the Source icon in the virtual jog control displayed on the screen is highlighted. Now, press the center of the jog dial in and hold for five seconds. The TV goes blank for about a second, indicating it is changing modes, and then switches back to Home Mode.



GSPN Updates

Jeff Brutman
Senior Staff, Publications

We encourage you to use our GSPN site to find the latest service bulletins to aid you with your repairs:

http://gspn3.samsungcsportal.com/

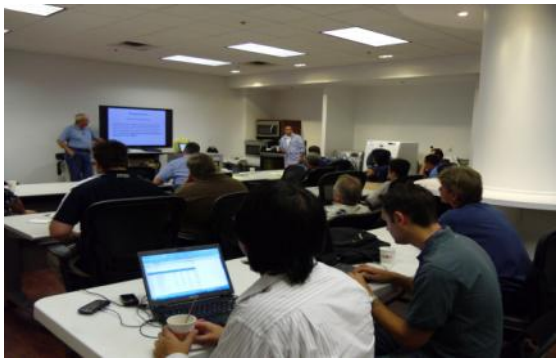
CE Service Bulletins uploaded to GSPN in October, 2012:

Bulletin Number	Subject	Applicable Models
ASC20121001001	How to test GPS functionality If a customer complains that GPS not working, follow the steps in the service bulletin to test and troubleshoot GPS functionality. .	WB850F Digital Camera

To access service bulletins on GSPN, first visit http://gspn3.samsungcsportal.com/ Login using your **User ID** and **Password**. Click on “Knowledge” at the top, then “Product Info” in the left column. The Product Information menu will appear. Click on “Service Bulletin (Local) to bring up the Service Bulletins (Local) screen. To search for a bulletin, enter the bulletin number in the Subject field on the left side of the screen, and then click the Search button on the far right. If for some reason the bulletin does not appear, it can still be searched using the “Category” drop-down menus, the Subject field, or the Model field. You can also try using the Search field at the top of the screen.

2012 RTC TV Training

Samsung Training 2012



For 2012, Samsung introduces a new way of training. To help you with your demanding schedule, updated training on new 2012 TV products will be one day long. To be eligible to attend the one day training session, techs must have attended and successfully completed 2011 TV product training in one of our training centers.

Samsung will still hold 3 day Basic classes quarterly. These classes are intended for new techs who have never attended a Samsung training, or for techs who need extra help to improve their skills.

Attend the in-depth, hands-on 1 day Update or 3 day Basic training at one of our RTCs!

You can reserve your seat in training by emailing training@sea.samsung.com.

You can always obtain the most up to date training list by sending an email to training@sea.samsung.com.

Additionally, TV training is available on-demand 24/7 at https://my.plus1solutions.net/clientPortals/samsung/.

Training Schedule:

Date	City	Comments
November 13, 2012	Sunnyvale, CA	FE/ASC 1 day Update Training (1 session only!)
November 27, 2012	Little Ferry, NJ	FE/ASC 1 day Update Training (Session 1)
November 28, 2012	Little Ferry, NJ	FE/ASC 1 day Update Training (Session 2)
November 29, 2012	Little Ferry, NJ	FE/ASC 1 day Update Training (Session 3)
November 30, 2012	Little Ferry, NJ	FE/ASC 1 day Update Training (Session 4)
December 4, 2012	Bensenville, IL	FE/ASC 1 day Update Training (Session 1)
December 5, 2012	Bensenville, IL	FE/ASC 1 day Update Training (Session 2)
December 6, 2012	Bensenville, IL	FE/ASC 1 day Update Training (Session 3)
December 6, 2012	Long Beach, CA	FE/ASC 1 day Update Training (1 session only!)

2012 RTC TV Training

continued

Date	City	Comments
December 7, 2012	Bensenville, IL	FE/ASC 1 day Update Training (Session 4)
December 18, 2012	Little Ferry, NJ	FE/ASC 1 day Update Training (Session 1)
December 19, 2012	Little Ferry, NJ	FE/ASC 1 day Update Training (Session 2)
December 20, 2012	Little Ferry, NJ	FE/ASC 1 day Update Training (Session 3)
December 21, 2012	Little Ferry, NJ	FE/ASC 1 day Update Training (Session 4)

Samsung Electronics America
85 Challenger Road
Ridgefield Park, NJ 07660

Phone: 201-229-4251

The information in this bulletin is published for experienced repair technicians only and is not intended for use by the public. It does not contain warnings to advise non-technical individuals of possible dangers in attempting to service a product. Only experienced professional technicians should repair products powered by electricity. Any attempt to service or repair the product or products dealt with in this information by anyone else could result in serious injury or death. Information provided in this bulletin is subject to change or update without notice.